			OTF	E	\	
IDS Form PTO/S	B/08: Substitute for for	m 1449A/FTO	·	9	§\	omplete if Known
SEP 2 8 2005			2005	Application Number	10/797,613	
INFO	DRMATION D	iscrogn	IRE	A	Filing Date	March 9, 2004
STA	TEMENT BY	ADDI ICA	MIT.	. a. 6	First Named Inventor	Brian ZAMBROWICZ
314	STATEMENT BY APPLICA THE BEAL OF				Art Unit	1632
	(Use as many sheets	as necessary)		$oldsymbol{oldsymbol{\sqcup}}$	Examiner Name	Shin Lin CHEN
Sheet	1	of			Attorney Docket Number	07705.0001-01000

		U.S. PATENTS	AND PUBLISHE	U.S. PATENT APPLICAT	IONS	
Examiner	Cite	Document Number	Issue or	Name of Patentee or	Pages, Columns, Lines, Where	
Initials	No.1	Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-		······································		
		US-				
		US-				
		US-				

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

	FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶			
m		WO 99/50426	10/07/1999	Lexicon Genetics Inc.					

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation ⁶
4NC		European Search Report mailed August 29, 2005, for European Patent Application No. EP 05 01 4225.	
		SALMINEN et al., "Efficient Poly A Trap Approach Allows the Capture of Genes Specifically Active in Differentiated Embryonic Stem Cells and in Mouse Embryos," Developmental Dynamics, 212:326-333 (1998)	
		ZAMBROWICZ et al., "Disruption and Sequence Identification of 2,000 Genes in Mouse Embryonic Stem Cells," Nature, 392:608-611 (1998)	
4cc		ZAMBROWICZ et al., "Comprehensive Mammalian Genetics: History and Future Prospects of Gene Trapping in the Mouse," Int. J. Dev. Biol., 42:1025-1036 (1998)	

Examiner			(1, 1	Date	/ / - /
	1 4h in -1	-1 14	1/11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1		1-11-01
Signature	ו איי ו	-1 1/	vvv	I Considered	15 7 10 0

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

OMB No. 0651-0011

INFORMATION DISCLOSURE CITATION 10/797,613 Appln. No. 07705.0001-01000 Atty. Docket No. Brian ZAMBROWICZ et al. Applicant 1632 Group: March 9, 2004 Filing Date

iling Date		Document	Issue Date		Name	Class	Sub Class	Filing Date If Appropriate
Examiner Initial*	Copy Encl.‡	Number				 	1	
		4,190,496	Feb 26, 1980		nstein et al.		-	
w	N	4,683,195	Jul 28, 1987	Mullis	et al.	 		
	N	4,683,202	Jul 28, 1987	Mullis			 	
	N	4,800,159	Jan 24, 1989		s et al.	 		-
	N	4,889,818	Dec 26, 1989	Gelfa	and et al.		-	
	N	4,959,317	Sep 25, 1990					-
	N N	4,965,188	Oct 23, 1990		is et al.		_	
	N	5,023,171	Jun 11, 1991		et al.			
	N N	5,066,584	Nov 19, 199		lensten et al.	_		
	N	5,075,216	Dec 24, 199		is et al.			
 	N N	5,079,352	Jan 7, 1992	Ge	Ifand et al.			
	N	5,091,310	Feb 25, 199					
 	N N	5,104,792	Apr 14, 199		ver et al.		-	
	N N	5,364,783	Nov 15, 19		uley et al.		_	
	- N	5,449,614	Sep 12, 19		anos et al.			
	N N	5,464,764	Nov 7, 199		apecchi et al.			
1-1-	N N	5,521,076	May 28, 19		Iulligan et al.			
		5,523,226	Jun 04,19		Vheeler			
-	$-\frac{1}{N}$	5,625,048	Apr 29, 19		rsien et al.			
-		5,641,670	Jun 24, 1		Treco et al.			
-	N	5,652,128	Jul 29, 19		Jarvik			
-		5,654,182	Aug 5, 19		Wahl et al.			
-		5,656,479	Aug 12,		Petitte et al.			
-	N N	5,679,523	Oct 21,		Li et al.			
	N		Nov 25,		Hogan			
	N	00.761	Mar 31,		Treco et al.			
 	n N		Apr 28,		Hodges et al.			er in U.S. Patent

^{*}Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appin. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Initial*			Class	Sub Class	Filing Date If Appropriate		
GN	N	5,767,336	Jun 16, 1998	Skarnes			
i	N	5,789,653	Aug 4, 1998	Skarnes	Ī		
	N	5,830,707	Nov 3, 1998	Bushman			
	N	6,080,576	Jun 27, 2000	Zambrowicz et al.			
	N	6,136,566	Oct 24, 2000	Sands et al.			
	N	6,139,833	Oct 31, 2000	Burgess et al.			
	N	6,207,371 B1	Mar 27, 2001	Zambrowicz et al.			
	N	6,436,707 B1	Aug 20, 2002	Zambrowicz et al.			
	N	08/728,963		Sands et al.			Oct 11, 1996
	N	09/443,282		Zambrowicz et al. Nov 19		Nov 19, 1999	
	N	09/570,923		Sands et al. May 1		May 15, 2000	
4	N	09/639,453		Sands et al.			Aug 15, 2000

Examine Initial*	Copy Encl.‡	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
Gu	N	WO 88/01646	Mar 10, 1988	PCT			
	N	WO 94/24301	Oct 27, 1994	PCT			
	N	WO 96/37626	Nov 28, 1996	PCT			-
	Y	WO 97/20038	Jun 5, 1997	PCT			
	N	WO 97/02323	Jan 23, 1997	PCT			
	N -	WO 97/06816	Feb 27, 1997	PCT			
	N	WO 98/20031	May 14, 1998	PCT			
	Υ	WO 98/24918	Jun 11, 1998	PCT			
	N	WO 99/50426	Oct 7, 1999	PCT			
4r	Υ	CA 2,274,092	Jun 3, 1999	Canada			

^{*}Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Initial* Copy Encl.‡		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
		Akam, 1987, "The molecular basis for metameric pattern in the <i>Drosophila</i> embryo," Development 101:1-22.		
	N	Akagi et al., 1997, "Cre-mediated somatic site-specific recombination in mice," Nucleic Acids Res. 25:1766-1773.		
	N	Allen et al., 1988, "Transgenes as probes for active chromosomal domains in mouse development," Nature 333:852-855.		
	N	Altschul et al., 1990, "Basic local alignment search tool," J. Mol. Biol. 215:403-410.		
	N	Auch et al., 1990, "Exon trap cloning: using PCR to rapidly detect and clone exons from genomic DNA fragments," Nucleic Acids Res. 18(22):6743-6744.		
	N	Bandyopadhyay et al., 1984, "Expression of complete chicken thymidine kinase gene inserted in a retrovirus vector," Mol. Cell. Biol. 4:749-754.		
	N	Barinaga, 1994, "Knockout mice: round two," Science 265:26, 28.		
	N	Barnes et al., 1993, "Anti-inflammatory actions of steroids: molecular mechanisms," TiPS Reviews 14:436-441.		
	N	Bellen et al., 1989, "P-element-mediated enhancer detection: a versatile method to study development in <i>Drosophila</i> ," Genes & Development 3:1288-1300.		
	N	Bier et al., 1989, "Searching for pattern and mutation in the <i>Drosophila</i> genome with a P-lacZ vector," Genes & Development 3:1273-1287.		
	N	Bonadio, 1990, "Transgenic mouse model of the mild dominant form of osteogenesis imperfecta," Proc. Natl. Acad. Sci. USA 87:7145-7149.		
	N	Bonnerot et al., 1992, "Capture of a cellular transcriptional unit by a retrovirus: mode of provirus activation in embryonal carcinoma cells," J. Virol. 66:4982-4991.		
	N	Bosselman et al., 1987, "Replication-defective chimeric helper proviruses and factors affecting generation of component virus: expression of Moloney murine leukemia virus structural genes via the metallothionein promoter," Mol. Cell. Biol. 7:1797-1806.		
	N	Botsford et al., 1992, "Cyclic AMP in prokaryotes," Microbiol. Rev. 56:100-122.		
	N	Bradley, 1991, "Modifying the mammalian genome by gene targeting," Cur. Opin. Biotech. 2:823-829.		
	N	Bradley et al., 1992, "Modifying the mouse: design and desire," Bio/Technology 10:534-539.		
	N	Brenner et al., 1989, "Analysis of mammalian cell genetic regulation in situ by using retrovirus- derived 'portable exons' carrying the Escherichia coli lacZ gene," Proc. Natl. Acad. Sci. USA 86:5517-5521.		
41	N	Burke et al., 1995, "Hox genes and the evolution of vertebrate axial morphology," Development 121:333-346.		

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Copy Initial* Encl.‡		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
w	N	Bushman, 1994, "Tethering human immunodeficiency virus 1 integrase to a DNA site directs integration to nearby sequences," Proc. Natl. Acad. Sci. USA 91:9233-9237.
		Bushman et al., 1997, "Tethering human immunodeficiency virus type 1 preintegration complexes to target DNA promotes integration at nearby sites," J. Virol. 458-464.
	N	Campbell et al., 1997, "Totipotency or multipotentiality of cultured cells: applications and progress," <i>Phenogenology</i> , 47:63-72.
	N	Capecchi, 1994, "Targeted gene replacement," Sci. Am., 270(3):52-59.
	N	Chakraborty et al., 1993, "Synthetic retrotransposon vectors for gene therapy," FASEB Journal 7:971-977.
	N	Chang et al., 1993, "Enrichment of insertional mutants following retrovirus gene trap selection," Virology 193(2):737-747.
	N	Chen et al., 1994, "Transcriptional enhancer factor 1 disruption by a retroviral gene trap leads to heart defects and embryonic lethality in mice," Genes & Development 8:2293-2301.
N Chen et al., 1994, "Large exon size does not li 2146.		Chen et al., 1994, "Large exon size does not limit splicing in vivo," Mol. & Cell. Biol., 14(3):2140-2146.
	N	Cho et al., 1976, "Revertants of human cells transformed by murine sarcoma virus," Science 194:951-953.
	N	Coulondre et al., 1977, "Genetic studies of the lac Repressor," J. Mol. Biol. 117:577-606.
	N	Dadoune, 1994, "The cellular biology of mammalian spermatids: a review," Bull. Assoc. Anat. 78:33-40.
	N	Danos et al., 1988, "Safe and efficient generation of recombinant retroviruses with amphotrophic and ecotropic host ranges," Proc. Natl. Acad. Sci. USA 85:6460-6464.
	N	Deng et al., 1995, "An insertional mutation in the BTF3 transcription factor gene leads to an early postimplantation lethality in mice," Transgenic Res. 4(4):264-269.
	N	Duyk et al., 1990, "Exon trapping: a genetic screen to identify candidate transcribed sequences in cloned mammalian genomic DNA," Proc. Natl. Acad. Sci. USA, 87:8995-8999.
	N Dymecki,1996, "A modular set of <i>Flp, FRT</i> and <i>lacZ</i> fusion vectors for manipulating ger site-specific recombination," Gene 171:197-201.	
	Υ	Erlich, 1989, PCR Technology: Principals and Applications of DNA Amplification, Stockton Press.
V	N	Evans et al., 1997, "Gene trapping and functional genomics," Trends in Genetics 13(9):370-374.
4M	Y	Forrester et al., 1996, "An induction gene trap screen in embryonic stem cells: identification of genes that respond to retinoic acid in vitro," Proc. Natl. Acad. Sci. USA 93:1677-1682.

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Copy OTHER DOCUMENTS (Including Author, Title, Date, Pert Initial* Encl. ‡		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
hr	N Friedrich et al., 1991, "Promoter traps in embryonic stem cells: a genetic screen to in mutate developmental genes in mice," Genes & Development 5:1513-1523.	
	N	Friedrich et al., 1993, "Insertional Mutagenesis by Retroviruses and Promoter Traps in Embryonic Stem Cells," in Methods in Enzymology Volume 225, P.M. Wassarman et al. eds., Academic Press, Inc., San Diego, pp 681-701.
	N	Frohman et al., 1988, "Rapid production of full-length cDNAs from rare transcripts: Amplification using a single gene-specific oligonucleotide primer," Proc. Natl. Acad. Sci. USA 85:8998-9002.
	N	Frohman, 1994, "On beyond classic RACE (Rapid Amplification of cDNA Ends)," PCR Methods and Applications, Manual Supplement, Cold Spring Harbor Lab., 4:S40-S58.
	N	Furth et al., 1994, "Temporal control of gene expression in transgeneic mice by a tetracycline-responsive promoter," Proc. Natl. Acad. Sci. USA, 91:9302-9306.
	N	Gasca et al., 1995, "Characterization of a gene trap insertion into a novel gene, cordon-bleu, expressed in axial structures of the gastrulating mouse embryo," Dev. Genet. 17:141-154.
	N	GENBANK Accession No. J01636, 1993
	N	Goff, 1987, "Insertional Mutagenesis to Isolate Genes," in Methods in Enzymology Volume 151, S.L. Berger et al. eds., Academic Press, Inc., San Diego, pp. 489-502.
	N	Goff, 1987, "[52] Gene isolation by retroviral tagging," in Methods in Enzymology Volume 152, S.L. Berger et al. eds., Academic Press, Inc., San Diego, pp. 469-481.
	N	Gogos et al., 1996, "Gene trapping in differentiating cell lines: regulation of the lysosomal protease cathepsin B in skeletal myoblast growth and fusion," J. Cell Biol. 134(4):837-847.
	N	Gogos et al, 1997, "Selection for retroviral insertions into regulated genes," J. Virol. 71(2):1644-1650.
	N	Gossler et al., 1989, "Mouse embryonic stem cells and reporter constructs to detect developmentally regulated genes," Science 244:463-465.
	N	Goulaouic et al., 1996, "Directed integration of viral DNA mediated by fusion proteins consisting of human immunodeficiency virus type 1 integrase and <i>Escherichia coli</i> LexA Protein," J. Virol. 70:37-46.
	N	Graham et al., 1991, "Chapter 11: Manipulation of Adenovirus Vectors," in Methods in Molecular Biology, Vol. 7: Gene Transfer and Expression Protocols, E.J. Murray ed., pp. 109-128.
	N Gruber et al., 1996, "Expression of the <i>Volvox</i> gene encoding nitrate reductase: Mutation dependent activation of cryptic splice sites and intron-enhanced gene expression from a Plant Molecular Biology 31:1-12.	
4N	N	Haas et al., 1993, "TnMax - a versatile mini-transposon for the analysis of cloned genes and shuttle mutagenesis," Gene 130:23-31.

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Initial*	Copy Encl.‡	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
he	N	Han et al., 1997, "Activation of the transcription factor MEF2C by the MAP kinase p38 in inflammation," Nature 386:296-299.
	N Hélène, 1991, "The anti-gene strategy: control of gene expression by triplex-forming oligonucleotides," Anticancer Drug Des. 6:569-584.	
	N	Helene et al., 1992, "Control of gene expression by triple helix-forming oligonucleotides," Annals N.Y. Acad. Sci. 660:27-36.
	N	Hicks et al., 1997, "Functional genomics in mice by tagged sequence mutagenesis," Nature Genetics 16(4):338-344.
	N	Hope, 1991, "'Promoter trapping' in Caenorhabditis elegans," Development 113:399-408.
	N	Hotfilder et al., 1994, "Isolation of developmentally-regulated genes from a hemotapoietic progenitor-cell line using a retroviral gene-trap-vector," J. Cellular Biochemistry S18A:11.
	N	Houghten et al., 1991, "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery," Nature 354: 84-86.
w	N	Ingraham et al., 1990, "A family of POU-domain and Pit-1 tissue-specific transcription factors in pituitary and neuroendocrine development," Annu. Rev. Physiol. 52:773-791.
Y Innie et al., 1990, PCR Protocols: A Guide to Methods and Application		Innis et al., 1990, PCR Protocols: A Guide to Mothods and Applications, Academic Press.
Sw	N	Inoue et al., 1983, "Rat mutant cells showing temperature sensitivity for transformation by wild-type moloney murine sarcoma virus," Virology 125:242-245.
	N	Jönsson et al., 1996, "Use of a promoter-trap retrovirus to identify and isolate genes involved in differentiation of a myeloid progenitor cell line <i>in vitro</i> ," Blood 87(5):1771-1779.
	N	Kang et al., 1997, "Dicistronic tagging of genes active in embryonic stem cells of mice," Mol. Cells 7(4):502-508.
	N Katz et al., 1996, "Targeting of retroviral integrase by fusion to a heterologous DN/domain: <i>In vitro</i> activities and incorporation of a fusion protein into viral particles," 217:178-190.	
N Kerr et al., 1989, "Transcriptionally defective retroviruses containing <i>lacZ</i> for the of endogenous genes and developmentally regulated chromatin," Cold Springs on Quantitative Biology Vol. LIV:767-776.		Kerr et al., 1989, "Transcriptionally defective retroviruses containing <i>lacZ</i> for the <i>in situ</i> detection of endogenous genes and developmentally regulated chromatin," Cold Springs Harbor Symposia on Quantitative Biology Vol. LIV:767-776.
	N	Khan et al., 1990, "Retroviral integrase domains: DNA binding and the recognition of LTR sequences," Nucl. Acids Res. 19:851-860.
l l	N	Kirchner et al., 1995, "Requirement of RNA polymerase III transcription factors for in vitro position-specific integration of a retroviruslike element," Science 267:1488-1491.
4m	N	Kozak, 1989, "The scanning model for translation: an update," J. Cell. Biol. 108:229-241.

^{*}Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

N	Kulkosky et al., 1995, "Activities and substrate specificity of the evolutionarily conserved central
	domain of retroviral integrase," Virology 206:448-456.
N	Lam et al., 1991, "A new type of synthetic peptide library for identifying ligand-binding activity," Nature 354: 82, 84.
N	Levine et al., 1991, "The p53 tumour suppressor gene," Nature 351:453-456.
N	Lewin, 1990, "Commitment and activation at Pol II promoters: A tail of protein-protein interactions," Cell 61:1161-1164.
N	Low et al., 1994, "Glucocorticoids regulate hippocampal 11β-hydroxysteroid dehydrogenase activity and gene expression <i>in vivo</i> in the rat," J. Neuroendocrinol. 6:285-290.
N	Maher, 1992, "DNA triple-helix formation: An approach to artificial gene repressors?," Bioassays 14:807-815.
N	Markowitz et al., 1988, "A safe packaging line for gene transfer: Separating viral genes on two different plasmids," J. Virol. 62:1120-1124.
N	Maruyama et al., 1981, "Characterization of flat revertant cells isolated from simian virus 40-transformed mouse and rat cells which contain multiple copies of viral genomes," J. Virol. 37: 1028-1043.
N	Mathey-Prevot et al., 1984, "Revertants and partial transformants of rat fibroblasts infected with Fujinami sarcoma virus," J. Virol., 50(2):325-334.
Y	McPherson et al., 1991, PCR: A Practical Approach, IRL Press.
N	Miller et al., 1995, "Target DNA capture by HIV-1 integration complexes," Current Biol. 5(9):1047-1056.
N	Moreadith et al.,1997, "Gene targeting in embryonic stem cells: the new physiology and metabolism," J. Mol. Med., 75:208-216.
N	Morgan et al., 1996, "Transposon tools for recombinant DNA manipulation: Characterization of transcriptional regulators from yeast, <i>Xenopus</i> , and mouse," Proc. Natl. Acad. Sci. USA 93:2801-2806.
Υ	Mullins et al., "Transgenesis in nonmurine species," Hypertension, 22:630-633 (1993).
N	Mullins et al.,1996, "Transgenesis in the rat and larger mammals," J. Clinical Investigation in Perspective Series: Molecular Medicine in Genetically Engineered Animals, 98(11, supplement):S37-S40.
N	Natarajan et al., 1995, "A lacZ-hygromycin fusion gene and its use in a gene trap vector for marking embryonic stem cells," Nucleic Acids Res. 23(19):4003-4004.
N	Niwa et al., 1993, "An efficient gene-trap method using poly A trap vectors and characterization of gene-trap events," J. Biochem. 113(3):343-349.
	N N N N N N N N N N N N N N N N N N N

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.	•	
Filing Date	March 9, 2004	Group:	1632

Examiner Initial*	Copy Encl.‡	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
4º	N	No et al., 1996, "Ecdysone-inducible gene expression in mammalian cells and transgenic mice," Proc. Natl. Acad. Sci. USA 93:3346-3351.
	N	Norton et al., 1984, "Expression of kirsten murine sarcoma virus in transformed nonproducer and revertant NIH/3T3 Cells: Evidence for cell-mediated resistance to a viral oncogene in phenotypic reversion," J. Virol. 50(2):439-444.
	N	Nussaume et al., 1995, "Analysis of splice donor and acceptor site function in a transposable gene trap derived from the maize element <i>Activator</i> ," Mol. Gen. Genet. 249:91-101.
	N	O'Banion et al., 1991, "A serum- and glucocorticoid-regulated 4-Kilobase mRNA encodes a cyclooxygenase-related protein," J. Biol. Chem. 266:23261-23267.
	N	Odell et al., 1990, "Site-directed recombination in the genome of transgenic tobacco," Mol. Gen. Genet. 223:369-378.
	N	Orkin et al., 1995, Report and Recommendation of the Panel to Assess the NIH Investment in Research on Gene Therapy.
	N	Ory et al., 1996, "A stable human-derived packaging cell line for production of high titer retrovirus/vesicular stomatitis virus G pseudotypes," Proc. Natl. Acad. Sci. USA 93:11400-11406.
	N	Oudet et al., 1978, "Nucleosome structure," Philos. Trans. R. Soc. Lond. 283:241-258.
	N Patriotis et al., 1994, "The activated MIvi-4 locus in Moloney murine leukemia virus cell lymphomas encodes an Env/MIvi-4 fusion protein," J. Virol., 68 (12):7927-793:	
	N	Pestov et al., 1994, "Genetic selection of growth-inhibitory sequences in mammalian cells," Proc. Natl. Acad. Sci. USA 91:12549-12553.
	N	Picksley et al., 1994, "p53 and Rb: their cellular roles," Curr. Opin. Cell. Biol. 6:853-858.
	N	Platt et al., 1994, "Independent regulation of adipose tissue-specificity and obesity response of the adipsin promoter in transgenic mice," J. Biol. Chem. 269:28558-28562.
	N	Pryciak et al., 1992, "Nucleosomes, DNA-binding proteins, and DNA sequence modulate retroviral integration target site selection," Cell 69:769-780.
	N	Ptashne et al., 1990, "Activators and targets," Nature 346:329-331.
	N	Rao et al., 1996, "Lamin proteolysis facilitates nuclear events during apoptosis," J. Cell Biol. 135:1441-1455.
	N	Reddy et al., 1991, "Retrovirus promoter-trap vector to induce <i>lacZ</i> gene fusions in mammalian cells," J. Virol. 65:1507-1515.
	N	Reddy et al., 1992, "Fluorescence-activated sorting of totipotent embryonic stem cells expressing developmentally regulated <i>lacZ</i> fusion genes," Proc. Natl. Acad. Sci. USA 89:6721-6725.
4u	N	Reilly et al., 1990, "Laboratory Methods: Transcription vectors that facilitate the identification and mapping of RNA splice sites in genomic DNA," DNA and Cell Biol. 9(7):535-542.

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appin. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Initial*	Copy Encl.‡	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
W	N	Rohdewohld et al., 1987, "Retrovirus integration and chromatin structure: Moloney murine leukemia proviral integration sites map near DNase I-hypersensitive sites," J. Virol. 61:336-343.
1	N	Ryan et al., 1985, "Isolation of a simian virus 40 T-antigen-positive, transformation-resistant cell line by indirect selection," Mol. Cell. Biol. 5(12):3577-3582.
	N	Sabbatini et al., 1997, "Interleukin 1β converting enzyme-like proteases are essential for p53-mediated transcriptionally dependent apoptosis," Cell Growth and Differentiation, 8:643-653.
	N	Sablitzky et al., 1990, "Isolation of developmentally regulated genes expressed by hematopoietic stem cells using a retroviral enhancer trap vector," J. Cell Biochem. Suppl., Symposia on Molecular and Cellular Biology, Park City, Utah, March 31 - April 6, 209 (M132).
	N	Sacks et al., 1979, "Abelson murine leukemia virus-infected cell lines defective in transformation, "Virology 97:231-240.
	N	Salminen et al, 1998, "Efficient polyA trap approach allows the capture of genes specifically active in differentiated embryonic stem cells and in mouse embryos," Developmental Dynamics, US, Wiley-Liss, Inc., 212:326-333.
	N	Sandmeyer et al., 1990, "Integration specificity of retrotransposons and retroviruses," Annu. Rev. Genet. 24:491-518.
	N	Sauer et al., 1990, "λ repressor: A model system for understanding protein-DNA interactions and protein stability," in <u>Advances in Protein Chemistry, Vol. 40</u> , C.B. Anfinsen et al. eds., Academic Press, Inc., San Diego, pp. 1-61.
	N	Sauer, 1994, "Site-specific recombination: developments and applications," Curr. Opin. Biotechnol. 5:521-527.
	N	Seamark, 1994, "Progress and emerging problems in livestock transgenesis: a summary perspective," Reprod. Fertil. Dev. 6:653-657.
	N	Sekine et al., 1989, "Frameshifting is required for production of the transposase encoded by insertion sequence 1," Proc. Natl. Acad. Sci. USA 86:4609-4613.
	N	Selten et al., 1985, "Proviral activation of the putative oncogene Pim-1 in MuLV induced T-cell lymphomas," EMBO J. 4(7):1793-1798.
	N	Shih et al., 1988, "Highly preferred targets for retrovirus integration" Cell 53:531-537.
	N	Shirai et al., 1996, "A gene trap strategy for identifying the gene expressed in the embryonic nervous system," Zoolog. Sci. 13(2):277-283.
	N	Skarnes et al., 1992, "A gene trap approach in mouse embryonic stem cells: the lacZ reporter is activated by splicing, reflects endogenous gene expression, and is mutagenic in mice," Genes Dev. 6(6):903-918.
m	N	Skarnes, 1993, "The identification of new genes: gene trapping in transgenic mice," Current Opinion in Biotechnology 4:684-689.

^{*}Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	Appln. No.	10/797,613
Applicant	Brian ZAMBROWICZ et al.		
Filing Date	March 9, 2004	Group:	1632

Examiner Initial*	Copy Encl.‡	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
W N		Smithies et al., 1985, "Insertion of DNA sequences into the human chromosomal β-globin locus by homologous recombination," Nature 317:230-234.				
j	N	Songyang et al., 1993, "SH2 Domains Recognize Specific Phosphopeptide Sequences," Cell 72:767-778.				
	N	Steinberg et al., 1978, "Isolation and characterization of T Antigen-negative revertants from a line of transformed rat cells containing one copy of the SV40 Genome," Cell 13:19-32.				
	N	Stephenson et al., 1973, "Characterization of morphologic revertants of murine and avian sarcoma virus-transformed Cells," J. Virol., 11(2):218-222.				
	N	Theiler, 1989, "24 Days Post Partum," in <u>The House Mouse, Atlas of Embryonic Development,</u> Springer-Verlag, New York, pp. 148-149.				
	N	Thomas et al., 1987, "Site-directed mutagenesis by gene targeting in mouse embryo-derived stem cells," Cell 51:503-512.				
	N	Thompson et al., 1989, "Germ line transmission and expression of a corrected HPRT gene produced by gene targeting in embryonic stem cells," Cell 56:313-321.				
	N	Valentine et al., 1994, "Glucocorticoids repress basal and stimulated manganese superoxide dismutase levels in rat intestinal epithelial cells," Gastroenterology 107:1662-1670.				
·	N	Varmus et al., 1981, "Retroviruses as mutagens: insertion and excision of a nontransforming provirus alter expression of a resident transforming provirus," Cell, 25:23-36.				
	N	Varmus et al., 1981, "Revertants of an ASV-transformed rat cell line have lost the complete provirus or sustained mutations in src," Virology, 108:28-46.				
	N	Varmus, 1988, "Retroviruses," Science 240:1427-1435.				
	Υ	Verma et al., 1997, "Gene Therapy - promises, problems, and prospects," Nature 389: 239-242.				
	N	Vinson et al., 1989, "Scissors-grip model for DNA recognition by a family of leucine zipper proteins," Science 246:911-916.				
	N	Vitaterna et al., 1994, "Mutagenesis and mapping of a mouse gene, clock, essential for circadian behavior," Science, 264:719-725.				
	N	Voet and Voet, 1995, Biochemistry, 2nd Ed., John Wiley & Sons, New York, pp. 944-949, 965, and 1054.				
	N	von Melchner et al., 1989, "Identification of cellular promoters by using a retrovirus promoter trap," J. Virol. 63:3227-3233.				
4	N	von Melchner et al., 1992, "Selective disruption of genes expressed in totipotent embryonal stem cells," Genes & Development 6:919-927.				

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

Atty. Docket No.	07705.0001-01000	10/797,613				
Applicant	Brian ZAMBROWICZ et al.					
Filing Date	March 9, 2004	Group:	1632			

Examiner Copy Initial* Encl.‡		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
W	N	Wang et al., 1995, "High frequency recombination between <i>loxP</i> sites in human chromosomes mediated by an adenovirus vector expressing Cre Recombinase," Somatic Cell and Mol. Genet., 21(6):429-441.
Ì	N	Wilson et al., 1986, "A frameshift at a mutational hotspot in the polyoma virus early region generates two new proteins that define T-antigen functional domains," Cell, 44:477-487.
	N	Wilson, 1997, "Vectors - shuttle vehicles for gene therapy," Clin. Exp., Immunol. 107(Suppl. 1):31-32.
N Wright et al., 1989, "Myogenin, a factor regulating myoge MyoD," Cell 56:607-617.		Wright et al., 1989, "Myogenin, a factor regulating myogenesis, has a domain homologous to MyoD," Cell 56:607-617.
	N Wurst et al., 1995, "A large-scale gene-trap screen for insertional mutations in c regulated genes in mice," Genetics 139:889-899.	
		Yagi et al, "Homologous recombination at c-fyn locus of mouse embryonic stem cells with use of diphtheria toxin A-fragment gene in negative selection," <i>Proc. Natl. Acad. Sci. USA</i> , 87:9918-9922 (1990).
	N	Yoshida et al., 1995, "A new strategy of gene trapping in ES cells using 3'Race," <i>Transgenic Res.</i> , 4(4):277-287.
		Zambrowicz et al., 1997, "Disruption of overlapping transcripts in the ROSA βgeo 26 gene trap strain leads to widespread expression of β-galactosidase in mouse embryos and hematopoietic cells," Proc. Natl. Acad. Sci. USA 94(8):3789-3794.
		Zambrowicz and Friedrich, 1998, "Comprehensive mammalian genetics: history and future prospects of gene trapping in the mouse," International Journal of Developmental Biology, 42:1025-1036.
41	N	Zambrowicz et al, 1998, "Disruption and sequence identification of 2,000 genes in mouse embryonic stem cells," Nature, 392:608-611.

Examiner	Shin-Lin	Chen	Date Considered	6-21-06			
*Examiner:	Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						
Form PTO 1	449	Patent a	and Trademark Office	e - U.S. Department of Commerc	<u>-</u>		

[‡]Copies that are not enclosed were previously submitted by the applicants or cited by the Examiner in U.S. Patent Application No. 09/443,282.

NFORMATION DISCLO
TATEMENT BY APPL

(Use as many sheets as necessary)

Sheet 1 of

Complete if Known						
Application Number	10/797,613					
Filing Date	March 9, 2004					
First Named Inventor	ZAMBROWICZ et al.					
Art Unit	1632					
Examiner Name	Not Yet Assigned					
Attorney Docket Number	07705.0001-01000					

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS							
Examiner	Cite	Document Number	Issue or	Name of Patentee or	Pages, Columns, Lines, Where		
Initials	No.1	Number-Kind Code ² (it known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear		
ar	-	US-6,776,988 B2	08-17-2004	Zambrowicz et al.			
GN		US-6,808,921 B1	10-26-2004	Zambrowicz et al.			

Note: Copies of the U.S. Patent Documents are not Required in IDS filed after October 21, 2004

2

FOREIGN PATENT DOCUMENTS									
Examiner Initials No.1		Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶			
w		CA 2,274,092	03-25-2003	Von Melchner					
		WO 96/29411	09-26-1996	Treco et al.					
		WO 98/07858	02/26/1998	Randazzo					
		WO 98/14614	04-09-1998	Sands et al.					
		WO 99/07389	02-18-1999	Burgess et al.					
an		WO 00/31236	06-02-2000	Zambrowicz et al.					

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation ⁶
GN		Cummings et al., "Genetically lean mice result from targeted disruption of the RIIß subunit of protein kinase A," <i>Nature</i> , 382:622-626 (1996).	
		Kappel et al., "Regulating gene expression in transgenic animals," Curr. Opin. Biotech., 3:548-553 (1992).	
		MacGregor et al., "Tissue non-specific alkaline phosphatase is expressed in both embryonic and extraembryonic lineages during mouse embryogenesis but is not required for migration of primordial germ cells," Development, 121:1487-1496 (1995).	
		Melton, "Gene targeting in the mouse," BioEssays, 16:633-638 (1994).	
		Shivdasani, "The role of transcription factor NF-E2 in megakaryocyte maturation and platelet production," Stem Cells, 14 Suppl 1:112-115 (1996).	
		Sigmund, "Viewpoint: are studies in genetically altered mice out of control?" Arterioscler. Thromb. Vasc. Biol., 20:1425-1429 (2000).	
		Office Action dated July 17, 2001, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.	
		Response filed September 17, 2001, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.	
		Office Action dated December 6, 2001, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.	
	·	Amendment Under 37 C.F.R. § 1.111 filed May 6, 2002, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.	
		Office Action dated July 15, 2002, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.	
		Amendment Under 37 C.F.R. § 1.116 filed October 15, 2002, In U.S. Patent Application No. 09/570,923, filed May 15, 2000.	
W		Advisory Action dated November 14, 2002, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.	

i			SIPE			
IDS Form PTO	/SB/08: Substitute for for	m 1449 PTO FEB	0 1 2005 4	C	omplete if Known	
		M	Ö	Application Number	10/797,613	
IN	FORMATION D ATEMENT BY	ISCL ÉSU	RE Ø	Filing Date	March 9, 2004	
72	ATEMENT BY	ADDI ICA	DEMARK	First Named Inventor	ZAMBROWICZ et al.	
31	ALEMENT DI	AFFLICA		Art Unit	1632	
	(Use as many sheets	as necessary)		Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket Number	07705.0001-01000	

	NON PATENT LITERATURE DOCUMENTS							
Office Action dated March 10, 2003, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.								
T	Amendment and Response filed September 10, 2003, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.							
T^{-1}	Office Action dated December 18, 2003, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.							
	Amendment and Response filed April 15, 2004, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.							
	Advisory Action dated May 12, 2004, in U.S. Patent Application No. 09/570,923, filed May 15, 2000.							
	Office Action dated October 4, 2001, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Response filed December 4, 2001, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Office Action dated February 26, 2002, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Amendment Under 37 C.F.R. § 1.111 filed May 24, 2002, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Office Action dated May 20, 2003, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Amendment and Response filed January 6, 2004, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Advisory Action dated January 21, 2004, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Office Action dated March 10, 2004, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Amendment and Response filed June 10, 2004, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
	Notice of Allowance and Fee(s) Due dated September 27, 2004, in U.S. Patent Application No. 09/639,453, filed August 15, 2000.							
1/	Office Action dated December 17, 2004, in U.S. Patent Application No. 10/359,033, filed February 4, 2003.							

							<u> </u>
Evaminae		•				Data	
Examiner	/ IA		1 .	///	1 //	l Date	/ ~ /
Cinnatura	-	1 1/1 ~	1 3 1/1	////	1 1/1/		1(1,1/1,1/1
Signature		,, *1	<i></i>	1/1/	() ()	Considered	1) 1/100
		<u> </u>		1/ /	<u> </u>	1 00::0:00:00	<u> </u>

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

			OIPE ?	205		
IDS Form PTO/S	B/08: Substitute for form	n 1449A/PTO	MAY 2 4 200	, d	C	omplete if Known
Ī		1	WVA	Age	cation Number	10/797,613
INE	ORMATION D	isci osk	ÅRF	A)	g Date	March 9, 2004
OT A	TEASENT DV	ADDLICA	AND & TRANSPA	Firs	t Named Inventor	Brian ZAMBROWICZ et al.
314	AIEWEN! DI	APPLICA	IN PINADO	Art	Unit	1632
	(Use as many sheets a	as necessary)		Exa	miner Name	Shin Lin CHEN
Sheet	1	of	1	Atto	mey Docket Number	07705.0001-01000

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS						
Examiner Initials	Cite No.1	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	
		Number-Kind Code ² (if known)			Relevant Passages or Relevant Figures Appear	
				· · · · · · · · · · · · · · · · · · ·		

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶
34		WO 97/09439 A1	03-13-1997	Genvec, Inc.		
<u> </u>						

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue publisher, city and/or country where published.		Translation ⁸		
w.		JEFFERSON et al., "β-Glucuronidase from Escherichia coli as a gene-fusion marker," Proc. Natl. Acad. Sci. USA, 83:8447-8451 (1986).			
in		NEHLS et al., "Exon amplification from complete libraries of genomic DNA using a novel phage vector with automatic plasmid excision facility: application to the mouse neurofibromatosis-1 locus," <i>Oncogene</i> , 9:2169-2175 (1994).			
4n		Communication Pursuant to Article 96(2)EPC for European Patent Application No. 97 910 766.1 - 1212 dated March 1, 2006.			
	<u> </u>	<u> </u>			

	Examiner Signature	Shin-Lin	Chen	Date Considered	6-21-06
--	-----------------------	----------	------	--------------------	---------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.